

CLAIMS

What is claimed is:

Sub A1

1. A method of operating a plurality of consumer electronic devices interconnected to form a network, said method comprising the steps of:
 - a) configuring a resource manager of said network with an access policy during network initialization;
 - b) receiving a service request indicating an identity of a user;
 - c) based on said identity, said resource manager determining whether said service request violates said access policy;
 - d) provided said service request is permissible, said resource manager determining whether resources of said network necessary for carrying out said service request are available; and
 - e) provided said resources necessary for carrying out said service request are available, said resource manager transmitting control signals to said network causing said plurality of consumer electronic devices to carry out said service request.
2. A method as recited in Claim 1 further comprising the step of returning a failure message to said user when said service request violates said access policy.
3. A method as recited in Claim 1 further comprising the step of maintaining a record of activities of said user.

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4. A method as recited in Claim 3 wherein said step (c) comprises
the step of retrieving said record of activities of said user from a log database
provided said access policy is dependent on user activities.

5. A method as described in Claim 1 further comprising the steps of:
communicating user identification information of said user to said server;
authenticating said user identification information; and
provided said user identification information is unauthenticated, denying
said user access to resources of said network.

10 6. A method as described in Claim 5 wherein said resources
comprise hard resources and soft resources, and wherein said hard resources
comprise said plurality of consumer electronic devices and wherein said soft
resources comprise content information accessible by said plurality of
15 consumer electronic devices.

20 7. A method as recited in Claim 6 wherein said step (d) comprises
the step of accessing a resource pool, wherein said resource pool contains
information regarding availability of said hard resources.

8. A method as recited in Claim 1 wherein said access policy is
stored in a policy database accessible by said resource manager.

25 9. A computer-readable medium having computer-readable program
code embodied therein for causing a computer system to perform a method of
managing resources within a network including a plurality of consumer
electronic devices, said method comprising the steps of:

a) configuring a resource manager of said network with an access policy during network initialization;

b) receiving a service request indicating an identity of a user;

c) based on said identity, said resource manager determining

5 whether said service request violates said access policy;

d) provided said service request is permissible, said resource manager determining whether resources of said network necessary for carrying out said service request are available; and

e) provided said resources necessary for carrying out said service

10 request are available, said resource manager transmitting control signals to said network to cause said plurality of consumer electronic devices to carry out said service request.

15 10. A computer-readable medium as recited in Claim 9 wherein said method further comprises the step of returning a failure message if said service request violates said access policy

20 11. A computer-readable medium as recited in Claim 9 wherein said method further comprises the step of maintaining a record of activities of said user.

12. A computer-readable medium as recited in Claim 11 wherein said step (c) comprises the step of retrieving said record of activities of said user from a log database provided said access policy is dependent on user activities.

25 13. A computer-readable medium as recited in Claim 12 wherein said method further comprises the steps of:

communicating user identification information of said user to said server;
authenticating said user identification information; and
provided said user identification information is unauthenticated, denying
said user access to resources of said network.

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~~Sub A~~ 14. A computer-readable medium as recited in Claim 13 wherein said
resources comprise hard resources and soft resources, and wherein said hard
resources comprise said plurality of consumer electronic devices and wherein
said soft resources comprise content information accessible by said plurality of
10 consumer electronic devices.

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~~Sub B~~ 15. A computer-readable medium as recited in Claim 14 wherein said
step (d) further comprising a step of accessing a resource pool that stores
availability information of said hard resources.

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16. A computer-readable medium as recited in Claim 11 wherein said
access policy is stored in a policy database accessible by said resource
manager.

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~~Sub C~~ 17. A home server coupled to control a network of consumer
electronic devices, said home server comprising:

- a) means for storing an access policy;
- b) means for receiving a service request indicating an identity of a
user;
- c) means for determining whether said service request violates said
access policy based on said identity;

d) means for determining whether resources of said network
necessary for carrying out said service request are available; and
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e) provided said service request is permissible and provided said
resources necessary for carrying out said service request are available, means
5 for causing respective ones of said consumer electronic devices to carry out
said service request.

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10 18. A home server as recited in Claim 17 further comprising means for
returning a failure message when said service request violates said access
policy.

15 19. A home server as recited in Claim 17 further comprising database
means for maintaining a record of activities of said user.

20 20. A home server as recited in Claim 19 further comprising means for
retrieving said record of activities of said user from said database means
provided said access policy is dependent on user activities.

25 21. A home server as recited in Claim 17 further comprising:
means for communicating user identification information of said user to
said server;
means for authenticating said user identification information; and
means for denying said user access to resources of said network
provided said user identification information is unauthenticated.

22. A home server as recited in Claim 21 wherein said resources
comprise hard resources and soft resources, wherein said hard resources

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comprise said plurality of consumer electronic devices and wherein said soft resources comprise content information accessible by said plurality of consumer electronic devices.

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5. A home server as recited in Claim 22 wherein said means (d) comprises means for accessing a resource pool that stores availability information of said hard resources.

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